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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,675	03/23/2004	Pci-Chung Wang	GP-303624	1150

7590 06/20/2005

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EXAMINER

SHAW, CLIFFORD C

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/806,675

Applicant(s)

WANG ET AL.

Examiner

Clifford C. Shaw

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1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0726</u> .  | 6) <input type="checkbox"/> Other: ____                                     |

**Detailed Action**

1.) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.) Claims 1, 2, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese document no. JP61-115680A. Figures 1 and 2 and the English abstract in the Japanese document no. JP61-115680A disclose the subject matter claimed. In particular, note: the first pulse labeled “IP1”; the second pulse labeled “IP2”; the two pulses having the amplitude relationships claimed and produced for transferring a droplet to the workpiece.

3.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4.) Claims 3-8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese document no. JP61-115680A. The only aspects of the claims to which the rejection above does not apply are the provisions for particular pulse periods, the provision for a globular mode of transfer, and the provision for gas metal arc welding. These differences do not

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patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have adjusted the pulse timing parameters and the amplitude parameters in the Japanese document no. JP61-115680A to correspond to the claimed timing and globular limitations, the motivation being to fine-tune the broad teachings of the Japanese document no. JP61-115680A for a particular welding situation that requires particular heating parameters and particular metal transfer rates, thereby satisfying the claims. Applicant is given Official Notice that gas shielding of consumable arc electrodes is well known. It would have been obvious to have provided gas shielding for the system of the Japanese document no. JP61-115680A if the well known advantages of the same were desired.

5.) Claims 1, 2, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by the British document no. GB2171267A. Figure 2 and the discussion thereof in the British document no. GB2171267A disclose a pulse welding method with the features claimed, including first and second pulses having the claimed amplitude and timing relationship.

6.) Claims 3-8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the British document no. GB2171267A. The only aspects of the claims to which the rejection above does not apply are the provisions for particular pulse periods and the provision for a globular mode of transfer. These differences do not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have adjusted the pulse timing parameters and the amplitude parameters in the British document no. GB2171267A to correspond to the claimed timing and globular limitations, the motivation being to fine-tune the

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broad teachings of the British document no. GB2171267A for a particular welding situation that requires particular heating parameters and particular metal transfer rates, thereby satisfying the claims.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw  
Primary Examiner  
Art Unit 1725

June 15, 2005